Closing the Republic of Korea’s Infrastructure Gap through Sustainable Public Private Partnerships, 1994–2005

Introduction
The Republic of Korea experienced rapid motorization during the 1980s. The country’s transportation network was unable to accommodate the increase in the number of cars, which led to serious traffic congestion and a significant, and costly, infrastructure gap. Increased investment in transportation infrastructure would be critical to fill this gap, but the budget of the Korean government was limited. For this reason, the Presidential Office of Korea organized a task force, the SOC (Social Overhead Capital) Planning Commission, to formulate policies for infrastructure financing. Two acts were developed as a result: the Transportation Tax Act of 1993, subsequently renamed the Act on Transportation, Energy, and Environment Tax of 2007, and the PPP Act, or the Act on Promotion of Private Capital into Social Overhead Capital Investment of 1994. Although the legislation of the PPP Act declared that the government was ready to welcome private companies to participate in public-private partnerships (PPPs), the promotion of PPPs slumped as the Asian financial crisis hit Korea in late 1997. In response, the Korean government made a wide range of systemic improvements in PPP projects to overcome the crisis and stimulate the economy and foreign direct investment.

Development Challenge
With rapid economic growth and national modernization, the number of registered passenger cars in Korea increased more than eightfold between 1980 and 1990, from 249,000 to 2,075,000. The country’s transportation infrastructure was insufficient to meet the needs of road users, including local residents, commuters, and the country’s growing industries. Korea faced a serious congestion problem and high logistical costs. In 1993, congestion costs and logistical costs were equal to 3.1 percent and 14.8 percent of the country’s GDP, respectively. Both costs increased through the 1990s (for example, by 1999, congestion costs stood at ₩18.4 trillion, representing well over US$16 billion, or 4.1 percent of GDP).

Intervention
The government of the Republic of Korea implemented the PPP Act in 1994 to promote investment in national infrastructure. The act aimed to induce private investment through several strategies: (a) providing tax benefits, such as tax incentives and the privilege of land acquisition for SPVs (special purpose vehicles—a subsidiary arrangement through which investors created companies to implement PPP projects, meant to mitigate certain risks), and an MRG (minimum revenue guarantee); (b) encouraging unsolicited proposals; and (c) establishing a PPP unit. However, a lack of detailed regulations and guidelines hampered the effectiveness of the policy. The act was later amended to introduce tax policies to
help facilitate companies’ participation in PPPs. Despite these efforts, the domestic and international economic situation, particularly the Asian financial crisis of the late 1990s, hindered the implementation of the PPP Act.

Addressing Delivery Challenges

The government began to push for PPP projects in earnest with the August 1994 enactment of the Act on Promotion of Private Capital Investment into Social Overhead Capital Investment. In 1998, the government moved to incentivize additional participation in infrastructure, reinvigorating PPPs through various forms of support, including the MRG, through which the government provided subsidies during the construction phase of a PPP project and once the project was in operation. The government modified this law again in January 2005, expanding the range of eligible facilities from those classified as economic infrastructure—transportation facilities, such as roads, railways, and seaports, and environmental facilities\(^1\)—to those classified as social infrastructure, such as schools, military residences, housing and welfare facilities for the aged, and cultural facilities. It introduced the build–transfer–operate (BTO) method in addition to the existing build–transfer–operate (BTO) method,\(^2\) expanding the scope of participation in PPP financing and diversifying opportunities for private companies to get involved. The Korean government expected to implement 45 projects from 1994 to 1998 with the PPP Act. However, only five projects reached financial closure or the ground-breaking stage by the end of 1998 (Taskforce on Comprehensive Countermeasure for Infrastructure 1998).

Efforts to implement and expand the PPP program encountered three key delivery challenges.

Lack of Detailed Rules and Regulations on PPP Project Implementation

When the PPP Act was legislated, detailed guidelines for the implementation phase for PPP projects were not developed. Each implementing agency developed its own PPP structure and procedures without standard guidance, which made it difficult for private investors, especially foreign investors, to understand the structure and implementation procedures of PPPs in Korea. The Korea Development Bank (KDB) surveyed 40 foreign financial institutions in Korea in 1998 and found that they hesitated to participate in Korean PPPs because the rules and regulations for implementing such projects were not streamlined or based on global standards (Taskforce on Comprehensive Countermeasure for Infrastructure 1998). This finding caused concerns for the future of private investment, as it indicated that potential investors would face uncertainty. Above all, the fact that the regulation was vague and unspecified hindered the transparency of PPP implementation. Key factors for financial viability, such as risk allocation and the scope of government support for projects, were effectively left to the discretion of officials of the Ministry of Strategy and Finance (MOSF) and related ministries. Protections to prevent project officers from being audited or inspected threatened to delay project implementation. And guidelines for risk allocation between public and private parties did not exist; expected return of PPPs did not balance risk, which was a critical problem from the investor perspective.

To resolve these challenges, the government formulated technical guidelines to define the roles and responsibilities of public and private entities, and it made the PPP implementation process more transparent and predictable. In addition, unsolicited proposals were incentivized in order to expedite PPP implementation.

Lack of Skills and Competencies within the Implementing Agencies

The PPP legislation was led by the Economic Planning Board, which was composed of representatives from the MOSF and the line ministries. However, implementation remained inactive because there was a lack of relevant skills in the public sector, especially within the implementing agencies and line ministries. To initiate a PPP project, the project

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1. Environmental facilities include facilities such as sewage treatment plants, refuse dumps, and landfills that are necessary basic infrastructure for national or regional development.
2. In the BTL method, ownership of the infrastructure facilities is transferred to the government on completion of construction, and the concessionaire is granted the right to operate the facilities and receive government payments (a lease payment plus operational costs) on the basis of operational performance (such as availability and service quality) for a specified period of time. The BTL method is used for facilities where the concessionaire would have difficulty recovering its investment cost through user fees. Facilities eligible for BTL contracts are mainly social infrastructure, such as schools, welfare facilities, environmental facilities, and military residences. In the BTO method, ownership of the infrastructure facilities is transferred to the government on completion of construction, and the concessionaire is granted the right to operate the facilities and gain return on investment. Because the concessionaire recovers its investment cost directly from user fees, commercial viability is a key element of a BTO project from the perspective of the concessionaire. Most BTO projects are transport facilities, such as roads, railways, and seaports.
officer had to identify a project amenable to a PPP and develop the structure for it. This process included tasks such as identifying and allocating risks and responsibilities between parties and “appraising project feasibility, commercial viability, and fiscal responsibility” (Park 2019). The project officer also had to understand issues related to legal transactions for contract management. Government officials in line ministries felt a big burden to acquire all these capacities and were afraid of being subject to audits and inspections if the projects failed. These issues were also closely related to the lack of standardized rules and regulations.

The PPP center of PICKO (Private Investment Management Center of Korea) was established by the amended PPP Act of 1999 to cope with these challenges. PICKO’s role was to facilitate PPP implementation by providing technical assistance to government agencies, holding capacity-building programs for government officials, and conducting research on PPPs. Consequently, PICKO became the one-stop center for PPP project implementation, inducing private investors to participate in PPPs (for example, through foreign direct investment). In response to concerns about fiscal discipline, PICKO was later replaced by the PIMAC (Public and Private Infrastructure Management Center), with a stronger mandate for promoting value for money.

**Lack of Strong Private Financial Institutions Capable of Developing Long-Term PPP Financing**

At the time the PPP act was passed, Korea had no private financial institution capable of developing long-term financial products suitable for PPP financing, which made it difficult to encourage the participation of private corporations. The amended PPP Act included tax benefits for SPVs and an MRG, which required a strong financial foundation. However, the Korean government could not fund this support alone, and it needed to revise the PPP Act to encourage sounder fiscal discipline. It did so in 2005, making risk-sharing requirements more rigorous, introducing a strong value-for-money test, and creating the PIMAC to perform due diligence and improve sustainability of PPPs. The MRG was gradually reduced and finally eliminated in 2009.

In addition, private financial institutions that could “appraise the financial viability of a project from a long-term perspective and on a nonrecourse or limited-recourse basis” were critical to promoting a stable PPP market (Park 2019). Korean financial institutions were accustomed to operating under tight regulation by government entities, and they lacked both the capacity and the incentive to develop long-term investment products for PPPs, including long-term financing.

Furthermore, the financial instability caused by the Asian financial crisis of 1997 affected the PPP market. When the crisis hit, interest rates increased sharply, blunting the implementation of PPPs. To cope with the crisis, the Korean government tried to restructure the PPP scheme and undertook a number of major economic reforms. Nonetheless, many major companies, including big construction contractors, wanted to withdraw from ongoing projects because of liquidity problems on the part of the projects’ sponsors.

**Lessons Learned**

The experience of Korea’s PPP program holds a few important lessons for the implementation of PPP programs.

**Enhancing Institutional Frameworks and Guidelines**

First, a streamlined institutional framework proved critical to the promotion of Korea’s PPP program. Detailed guidance to articulate the PPP implementation process step by step, as well as PPP legislation, was necessary to induce private investment. Such guidelines benefit both private and public parties, reduce project risk by making projects’ futures more foreseeable and, accordingly, reduce the asking return on investment of SPVs. Guidelines can also help government officials who are unwilling to develop PPP projects because of worries about being blamed for project failure. The guidelines provide a basis for their decisions, and officials can refer to them when projects fail.

**Ensuring Fiscal Soundness**

Second, the experience of PPPs in Korea shows the importance of balancing market promotion and fiscal soundness. Government support to promote PPPs—especially the MRG—and to expedite the PPP initiation process effectively
expanded Korea's PPP program in the wake of the Asian financial crisis. However, the rapid expansion of the PPP program created new burdens on fiscal management. Government payments because of the MRG clause and high user charges were at the center of criticism of the PPP program. To address these side effects and concerns raised by citizens groups, the government has, since 2005, emphasized fiscal discipline in PPP management. In 2015, the government introduced new risk-sharing schemes called BTO-rs (risk sharing) and BTO-a (adjusted) under which the government shared some risk to protect SPVs from bankruptcy because of a revenue shortage. This new risk-sharing scheme was intended to induce participation of private investors who had reservations about investing in PPP projects with high risk and low return.

**Role of the Dedicated PPP Unit**

Third, the creation of a dedicated PPP unit—first within the PICKO, and later within the PIMAC—was a crucial institutional development. This PPP unit took on multiple roles to advance and facilitate PPP implementation, including “policy adviser, designer and implementer of PPPs, and manager of long-term PPP contracts” (Park 2019). The unit also provided regular capacity-building programs for public and private parties in order to build long-term institutional capacity.

**Bibliography**


